



COPY

Hon. Commissioner of Patents and Trademarks
S/N—09/975,376
Re: Applicant - Mirkin, et al.

Atty EM

Case No. 00-713-i12

Nanoparticles Having Oligonucleotides Attached Thereto and Uses Therefor
VIA HAND DELIVERY TO EXAMINER JEZIA RILEY, GROUP ART UNIT 1637

Sir:

Please place the Patent Office receipt stamp hereon and mail to acknowledge receipt of:

- ☒ Transmittal Letter
- ☒ Seventh Supplemental Information Disclosure Statement
- ☒ U.S. PTO 1449 Form with copies of 11 references

Fee Enclosed
\$ 0

Respectfully,
McDonnell Boehnen Hulbert & Berghoff
Attorney for Applicant

RECEIVED
11/06/2003

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No. 00-713-i12)

COPY

In the Application of:

Chad A. Mirkin, et al.

Serial No.: 09/975,376

Filed: October 11, 2001

For: NANOPARTICLES HAVING
OLIGONUCLEOTIDES ATTACHED
THERE TO AND USES THEREFOR



Examiner: Jezia Riley

Group Art Unit: 1637

Confirmation No.: 9821

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

SEVENTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

In order to comply with discretionary regulations 37 CFR §§1.97 and 1.98, attached hereto is Form PTO-1449, copies¹ of the documents listed thereon. These documents contain information which the Examiner may consider to be important in deciding whether to allow the present application to issue as a patent.

1. Heller, et al., U.S. Patent No. 4,966,143 issued 02/26/91
2. Kausch, et al., U.S. Patent No. 5,508,164 issued 04/16/96
3. Ewart, et al., U.S. Patent No. 5,922,537 issued 07/13/99
4. An, et al., U.S. Patent No. 5,972,615 issued 10/26/99

¹To the extent that a document is listed and no copy of same is attached, then such document is not at the present time available to the undersigned or is available in the file of a parent application. If a listed document is not in the English language and an English translation is readily available, such translation is also attached; if translation is not attached it is not readily available to the undersigned. If a foreign language patent document is cited, and an English language equivalent is known to the undersigned, then such equivalent patent is also cited on the attached form along with the corresponding foreign language patent and a connecting arrow indicated there between; if no such English language equivalent is cited, then none is known to undersigned.

5. Blackburn, et al., U.S. Patent No. 6,264,825 issued 07/24/01
6. Yguerabide, et al., U.S. Patent No. 6,214,560 issued 04/10/01
7. International Patent WO 94/29484 published 12/22/94
8. International Patent WO 00/25136 published 05/04/00
9. Mohanty J., et al., "Pulsed laser excitation of phosphate stabilized silver nanoparticles," *Proc. Indian Acad.*, Vol. 112, No. 1, p. 63-72 (2000)
10. Nicewarner- Peña S., et al., "Hybridization and Enzymatic Extension of Au Nanoparticle-Bound Oligonucleotides," *J. Am. Chem. Soc.*, Vol. 124, p. 7314-7323 (2002)
11. Whitesides G.M., et al., "Soft Lithography in Biology and Biochemistry," *Annu. Rev. Biomed. Eng.*, p. 335-373 (2001)

In accordance with MPEP Sections 609 and 707.05(b), it is requested that each document cited (including any cited in applicant's specification which is not repeated on the attached Form PTO-1449) be given thorough consideration and that it be cited of record in the prosecution history of the present application by initialing on Form PTO-1449. Such initialing is requested even if the Examiner does not consider a cited document to be sufficiently pertinent to use in a rejection, or otherwise does not consider it to be prior art for any reason, or even if the Examiner does not believe that the guidelines for citation have been fully complied with. This is requested so that each document becomes listed on the face of the patent issuing on the present application.

The present Disclosure Statement is being submitted in compliance with 37 CFR 1.56 insofar as an Examiner might consider any of the cited documents important in deciding whether to allow the application to issue as a patent, but the citation of each document is not to be construed as an admission that such document is necessarily relevant or prior art. No representation is intended that the cited documents represent the results of a complete search, and it is anticipated that the Examiner, in the normal course

of examination, will make an independent search and will determine the best prior art consistent with 37 CFR 1.104(a) and 1.106(b) and, in the course of each search, will review for relevance every document cited on the attached form even if not initialed.

Early and favorable consideration is earnestly solicited.

Respectfully submitted,

Dated: _____

5/6/03

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FORM PTO-1449
(Rev. 2-32)

U.S. Department of Commerce
Patent and Trademark Office

Atty. Docket No.

00-713-i12

Serial No.

09/975,376

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use several sheets if necessary)



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Applicant:

Chad A. Mirkin, et al.

Filing Date:

October 11, 2001

Group:

1637

U.S. PATENT DOCUMENTS

| Examiner Initial | | Document Number | Date | Name | Class | Subclass | Filing Date if Appropriate |
|------------------|----|-----------------|----------|--------------------|-------|----------|----------------------------|
| | 1. | 4,996,143 | 02/26/91 | Heller, et al. | 435 | 6 | 04/13/90 |
| | 2. | 5,508,164 | 04/16/96 | Kausch, et al. | 435 | 6 | 10/29/93 |
| | 3. | 5,922,537 | 07/13/99 | Ewart, et al. | 435 | 6 | 11/8/96 |
| | 4. | 5,972,615 | 10/26/99 | An, et al. | 435 | 6 | 01/21/98 |
| | 5. | 6,264,825 | 07/24/01 | Blackburn, et al. | 205 | 777.5 | 06/23/99 |
| | 6. | 6,214,560 | 04/10/01 | Yguerabide, et al. | 435 | 7.1 | 04/18/97 |

FOREIGN PATENT DOCUMENTS

| | | Document Number | Date | Country | Class | Subclass | Translation | |
|--|----|-----------------|----------|---------|-------|----------|-------------|----|
| | | | | | | | Yes | No |
| | 7. | WO 94/29484 | 12/22/94 | PCT | | | | |
| | 8. | WO 00/25136 | 05/04/00 | PCT | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|--|-----|--|
| | 9. | Mohanty J., et al. "Pulsed laser excitation of phosphate stabilized silver nanoparticles," <i>Proc. Indian Acad. Sci.</i> , Vol. 112, No. 1, p. 63-72. |
| | 10. | Nicewarner- Peña S., et al., "Hybridization and Enzymatic Extension of Au Nanoparticle-Bound Oligonucleotides," <i>J. Am. Chem. Soc.</i> , Vol. 124, p. 7314-7323 (2002) |
| | 11. | Whitesides G.M., et al., "Soft Lithography in Biology and Biochemistry," <i>Annu. Rev. Biomed. Eng.</i> , p. 335-373 (2001) |

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.